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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,285	02/17/2004	Yongbin Wei	030560	3337
23696	7590	02/06/2007	EXAMINER	
QUALCOMM INCORPORATED 5775 MOREHOUSE DR. SAN DIEGO, CA 92121			GARY, ERIKA A	
			ART UNIT	PAPER NUMBER
			2617	
SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE		DELIVERY MODE	
3 MONTHS	02/06/2007		ELECTRONIC	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 02/06/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/781,285	WEI ET AL.
	Examiner Erika A. Gary	Art Unit 2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 17 February 2004.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,3,4,8-11,13-16,18-26 and 28-43 is/are rejected.
- 7) Claim(s) 2,5-7,12,17 and 27 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All    b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 5-7 are objected to because of the following informalities: it appears claims 5-7 should depend upon claim 2 and not claim 3 to provide proper antecedent basis. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 10 is indefinite as it recites allocating to "zero or more" remote stations and granting "zero or more" access grants. Therefore the means is in essence not performing a function if it is "zero". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.
5. Claims 41-43 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 41-43 lack the proper preamble necessary for a statutory computer program product claim. See MPEP 2100 for

guidance on computer related inventions. The examiner suggests a preamble as follows:

"A computer readable medium encoded with a computer program to perform the following steps:"

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 24, 34, 37, 40, and 43 are rejected under 35 U.S.C. 102(b) as being anticipated by Applicant's submission of prior art, Esteves et al., US Patent Number 6,205,129 (hereinafter Esteves).

Regarding claims 24, 34, 37, 40, and 43, Esteves discloses an apparatus, comprising: a receiver for receiving a first rate control channel and a second rate control channel; and a processor for determining a rate control command from the first rate control channel in a first mode and a second rate control channel in a second mode [abstract; col. 2: lines 18-28; col. 3: lines 12-25].

8. Claims 1, 3, 8-11, 13-16, 18-26, and 29-43 are rejected under 35 U.S.C. 102(e) as being anticipated by Khan, US Patent Application Publication Number 2004/0203973 (hereinafter Khan).

Regarding claims 1, 16, 25, 32, 35, 36, 38, 39, 41, and 42, Khan discloses an apparatus, comprising: a processor for receiving an acknowledgement command and a rate control command and generating a combined command therefrom [fig. 1; paragraphs 0009, 0018, 0023].

Regarding claims 24, 34, 37, 40, and 43, Khan discloses an apparatus, comprising: a receiver for receiving a first rate control channel and a second rate control channel; and a processor for determining a rate control command from the first rate control channel in a first mode and a second rate control channel in a second mode [figs 2-3; paragraphs 0009, 0018-0023].

Regarding claims 3 and 26, Khan discloses a transmitter for transmitting a signal generated from the combined command [paragraph 0013].

Regarding claims 8 and 29, Khan discloses a receiver for receiving a transmitted packet; and a decoder for decoding the received packet, determining if the received packet was received correctly, and generating the acknowledgment command accordingly [paragraphs 0013, 0015].

Regarding claim 9, it is inherent that the acknowledgment command indicates the received packet is acknowledged when decoded correctly and not acknowledged otherwise.

Regarding claims 10 and 30, Khan discloses allocating a portion of a shared resource to one or more remote stations; and generating the rate control command according to the allocation [paragraph 0008].

Regarding claim 11, Khan discloses the rate control command indicates hold, increase, decrease, or stop [fig. 1].

Regarding claims 13 and 31, Khan discloses the transmitter transmits a signal generated from the combined rate control command directed to a remote station, and a second signal comprising a common rate control command to a plurality of remote stations [paragraph 0013].

Regarding claim 14, Khan discloses the transmitter transmits a command directed to a remote station indicating the remote station should monitor the second signal [paragraphs 0019-0022].

Regarding claim 15, Khan discloses the command directed to the remote station indicating the remote station should monitor the second signal is a combined command associated with a positive acknowledgement command and a stop rate control command [paragraph 0023].

Regarding claim 18, Khan discloses a receiver for receiving a signal comprising the combined command [0009, 0013, 0018, 0023].

Regarding claims 19 and 33, Khan discloses transmitting a subpacket at a transmission rate, the transmission rate adjusted in accordance with the rate control command; and retransmitting a subpacket in accordance with the acknowledgement command [fig. 3].

Regarding claim 20, Khan discloses the receiver further receives a common rate control signal comprising a common rate control command [fig. 2].

Regarding claim 22, Khan discloses a combined command indicating acknowledge and stop indicates a transmission from the first mode to the second mode [fig. 2].

Regarding claim 23, Khan discloses a received grant command indicates a transition from the second mode to the first mode [fig. 2].

### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 4 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Khan.

Regarding claims 4 and 28, Khan does not specifically disclose that the signal is a QAM signal. However, the Examiner takes Official Notice that this type of signal is well known in the art. It would have been obvious to one of ordinary skill in the art at the time of the invention to include a QAM signal as a matter of design specifications of the type of wireless network used.

***Allowable Subject Matter***

11. Claims 2, 5-7 (corrected as dependent upon claim 2), 12, 17, and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erika A. Gary whose telephone number is 571-272-7841. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on 571-272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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EAG  
February 1, 2007

  
ERIKKA A. GARY  
PRIMARY EXAMINER